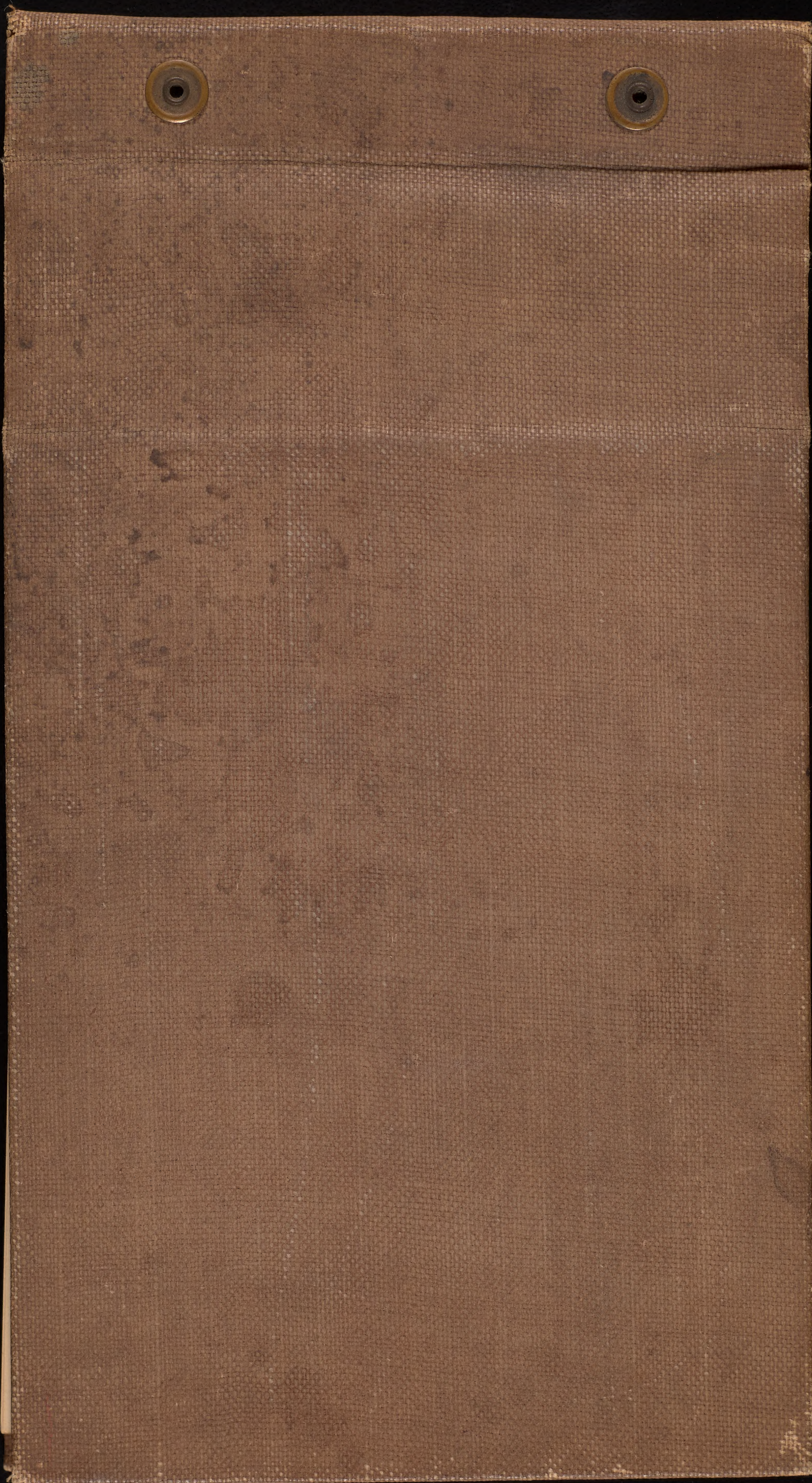
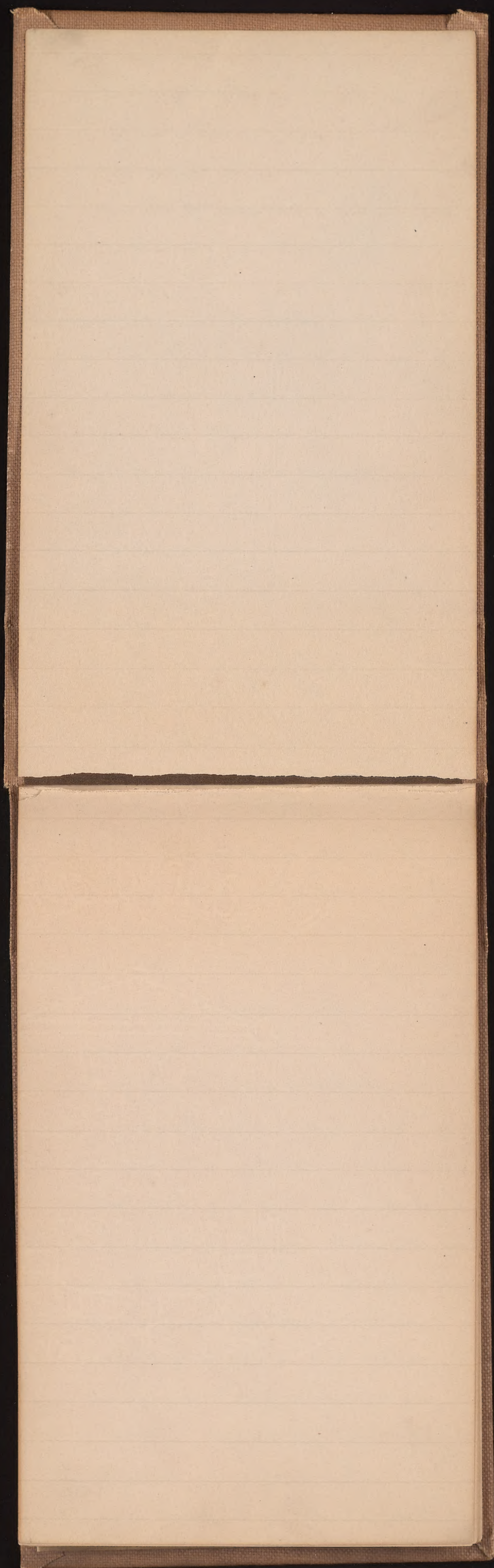




Dec 16. Ticket fr. Wash. D.C. to Victoria Tex (S.R.)	39. 30
" " Sleeping Car " " New Orleans, La	6. 50
" 17 Transfer of baggage, Washington, D.C.	25
" " Dinner Dining Car S.R.	1. 00
" 18 Breakfast " " "	65
" 18 Dinner Houston, Tex. 50¢, Supper h.o., do	35 85
" " Porter Sleeping Car, h.o. do	25
" " Sleeping Car h.o., h., to Houston Tex	2. 00
" " Porter Sleeping Car	25
" 19 Breakfast, Houston, Tex, ✓	50
" 19 Lunch, Rosenberg Junction, Tex.	25
" 26 Board & Lodging, Dec. 19 to Dec. 26 (v. 1) ...	51 30
Jan. 2, 1902 " " " " 26 to Jan. 2, 1902 (v. 2)	10. 50
April 22 Ticket from Victoria to Washington	39. 30
Transfer of baggage, Victoria Tex	25
Sleeping car from Houston, Tex to New Orleans, La	2. 00
Fee, for Pullman Sleeps Porter	25
" 23 Sleeping Car New Orleans, La, to Wash. D.C.	6. 50
" 24 Transfer of baggage, Wash. D.C.	25
Notes public, Wash. D.C.	25



Texas Trip 1901-1902

Tuesday Dec. 17. Left Washington at 11¹⁵ A.M. via S. R.

Wednesday " 18 Traveled between Atlanta & New Orleans. Ice to
be seen everywhere.

Thursday " 19 Arrived at Victoria, Tex. 3¹⁵ P.M. Mr. Hunter
met me at the depot and we went at once to Mr.
Heath place about 4 miles north of Victoria along
the Guero R.R. where the cotton had been plowed
up some time in September. Cannot understand why
a patch had been left standing because this spoils
every prospect of controlling the results of the experiment.
The upper part of the field which had been plowed in
the fall consists of light sandy soil. A number of pigs
were rooting on the soil but apparently did not find much
since they constantly followed us. Did a little digging
ourselves but did not find anything except a few
solitary ants. Weather very chilly with a cold northern
wind blowing. — Went to see Mr. Goldman. — Spoke
to Mr. Hunter about work to be done. — My board bill
commences with supper, Thursday, Dec. 19th.

Friday Dec 20. - Weather extremely cold - 26° - Went with Hunter who introduced me to various people interested in cotton. The opinion of these men may be divided into two classes: 1) those that advocate the destruction of *Anthonomus grandis* by every means 2) those that consider the weevil as a good thing partly for the reason that it will force the farmers to adopt a more diversified agriculture and partly for the reason that the destructive power of the weevil will prevent overproduction and keep ^{up} the price of cotton. - Hunter left with the morning train for Houston. - Fixed my traps up a little - P.M. took a walk across the bridge. In one cottonfield the old stalks are collected in windrows but this was apparently done after the appearance of cold weather. Found two *Coccinella affinis* (one yellow with black spots, the other black with red dorsal spot) under bark of *Sycamore*. Three packages of supplies came from the Department.

Saturday, Dec. 21, 1901 - Weather still intensely cold, but there seems to be a change of wind. Went to Mr. Goldman's Cotton gin and witnessed the ginning. The refuse barrel contains a large number of various insects and spiders which, without exception, pass through the process of cleaning without injury. There is the usual fauna of the "rotten cotton bolls" but also many species that have no connection with cotton. *Anthrenus grandis* is quite common and the living specimens seem to outnumber the dead ones. There are at least 200 living specimens of *Anthrenus* in every wheel-barrow full of refuse and this refuse is dumped into the yard. The chickens work this stuff over but without them all these many weevils are at liberty to seek safe winter quarters. Some of them I witnessed taking wing and fly away. Seven or eight wheel-barrow full of refuse is obtained during one day and if the weevils be evenly distributed there are at least 2000 living ^{liberated} weevils distributed every day by Mr.

Goldman's gin. as often as the gin is run. Many of the weevils are torpid when the refuse matter is brought out but in the bright warm sunlight those in the upper layer revive and become lively. They

do not take wing readily; at first they open the elytra a little and seem to pump in air, then the wings suddenly are spread out and at the same moment the elytra are spread out too and the beetle flies away.

Sunday Dec. 22, 1901. Sifted in A.M. a sack-full of cotton refuse I brought home from the gin, but found but little of interest. The heavy sand which forms the greater portion of the refuse having smashed nearly everything. P.M., weather quite warm: went into the river bottom directly west of the town but failed to find a locality suitable for sifting. Everything is quite dry and the ground beneath the old leaves is hard as stone.

Monday, Dec. 23, 1901. Weather fine and warm. Went into the bottom land about 2 miles from the hotel: found a cotton field with the plants still standing and timber near by. Sifted under the grassy patches among the cotton plants but there is hardly any protection from cold weather in such places unless the weevils go into the hard ground. A few *Seymouria* etc. were all I could find. Failed to find living weevils in the cotton bolls but an old negro told me they could now be found in such places. Found some living *Anthrenus*,

larvae in the dead buds and one or two in the old squares.
Found also 2 living pupae in the blossoms. P. M. Went to the
same place again and sifted in the woods but failed to get any
weevils. Found *Zophorus halldemani* (2 dead) in cells within the rather
hard wood of a prostrate oak log.

Tuesday Dec. 24, 1901. Went out to Mr. Goldman's gin to get more
particulars. The cotton ginned last Saturday was of very inferior
quality and represents the very latest pickings - Mr. G. stating that
most of it was picked after the advent of the cold wave. - This
is hardly credible. - The cotton was in possession of Mr. G. not
longer than a week and comes ~~in~~ in small particles from a
great number of places. - Saw Mr. Mitchell in P. M.

Wednesday, Dec. 25, 1901 - Mr. Goldman came to me in the forenoon
and I could not do any work. Took dinner in his house and in
p. m. went to Mr. Mitchell who showed me his collections and
his notes. Has *Cicindela severa* from Calhoun Co, Tex.

Thursday, Dec. 26, 1901 - Weather cloudy but warm. Went again to the
cottonfield in the river bottom. Sifted in the heavy timber nearly
adjoining the field but failed to find the weevils. Beat up the old corn

Husk: There are some insects there but no *Anthrenus*. Found a
living *Anthrenus* at the base of an ^{leaf of} dead corn stalk. Found also
some more living *A. larvæ* and one living pupa. — P.M. Went back
again and found 4 more specimens of living *A.g.* under
corn leaves surrounding old stalks.

Friday Dec 27th Caught a severe cold yesterday and felt
miserable the whole day. Tried to write to Dr. Howard and
to copy my notes but did not progress much.

Saturday Dec 28th. It rained heavily last night and this
morning. Weather very unpleasant. Went to J.'s gin where
I found that Mr. G. was not there. Mr. Hall told me that in
the forenoon a miscellaneous lot of cotton was to be ginned.
Examined the refuse barrel and saw many *A.g.* in it. Saw
that a great flock of blackbirds was helping the chickens to pick
over the refuse in the yard. Went again to the gin in the p.m.
when as Mr. Hall assured me, only cotton of the latest pickings
was to be ginned. Found several *A.* in the barrel but hardly
any other insects. There is no reliance to be placed in the
assurance of the gin-people as to what cotton is ginned now.

They manifestly do not know themselves at what time the cotton is picked which is now being ginned. If the weevils were really hibernating in the bolls I would have found at least one specimen now.

Sunday Dec. 29th — Sifted with great care a big sacful of refuse cotton from yesterday afternoon. Weevils are infinitely rarer than last week: did not find more than about 15 specimens. Other insects are also quite rare: *Silvanus 4-collis* & *Calos* being quite common. Spiders also rare: a few *Leuca texana* and *Calandse oryzae* — P. M. — went across the bridge and into the bottom woods opposite the ice factory. Failed to find the *A.* under Sycamore bark although this seems to be a good winter retreat. Found one *A.* under thick layer of old leaves near the river bank.

Monday Dec 30. — Weather quite cold in the morning but warming up toward noon. Went to the old cottonfield in the river bottom found some more living larvae & pupae of *A.* in the blossoms. Tried to sieve under the heaps of old corn stalks but found that this is a difficult task which cannot be done thoroughly. A corn field adjacent to the above cotton field was thoroughly burned

over so that not the slightest shelter remains for any insects to retreat
still further on. There is a little cotton field - I wouldly situated between
two pieces of timberland. The new plant of cotton bolls is it hardly
a single finger thorn or square; this is probably due to the prevalence
of late corn of cotton worms. Did not find here a single living larva
of it.

Tuesday, December 31st Left city in the morning, with my gun
and some traps, and went again to the bottom land and
passed along the road until it terminated abruptly at the bottom
woods. Between the end of this road & the river is an extensive cotton
field a portion of which, that nearest the road is already plowed. The old
stalks are here plowed up and then rolled together into heaps by means
of a beam dragged along the rows. The heaps of old stalks are then
burned. During this process, ^{and making} ~~the process of plowing~~ many of the blossoms are ~~stripped~~
off and fall to the ground where they are plowed under, and in all
probability the larvae or pupae of the insect complete their transformations under
ground. - Went into the dense woods of the river banks but failed to find
any insects by sifting. Also failed to find them under the old bark of
some trees.

Wednesday, Jan. 1, 1903. Weather as yesterday. Took a long walk
north into the prairie. Did not find a single cotton field. The
prairie here consists of white clumps of *Acacia farnesiana* with
stems of sweet grass and tall weeds, offering but little shelter for
insects for winter. Failed to find any *Antrenomus*. In fact did
not find any insects worth mentioning.

Thursday, Jan. 2, 1903. Went into the bottom. Took the upper road, came
to a cotton field where the old stalks had been pulled up; found many
living larvae and pupae of *Antrenomus*. The process of pulling the old
stalks does not seem to knock down a great portion of the old
flower blossoms and seems, therefore, to be preferable to the plowing
up or breaking down methods.

Friday, Jan. 3, 1903 — Foggy and drizzling weather. Went out for
an exploring expedition; took the road north along the Cusco R.R.
and then walked back through the bottom. P. M. Went south east of
the city along the M. de Saco R.R. and found a cotton field deeply
buried in weeds where the cotton had been raised from previous year's
plant. Found living larvae in moderate numbers. It is next to
impossible to sift under the large mass of weeds bordering the field.

Saturday, Jan. 4 — Weather much colder — a cold wave approaching —

I cut out in the bottom to improve my topographical knowledge, the weather being too cold for observation. In passing the cotton field with the pulled old stalks I crawled through the fence but found only a single larva whereas a few days ago I found only a couple of hundred feet away, many larvae.

Saturday, Jan. 5 — Below freezing point in the morning.

Took a long walk over the bridge but although I walked about 4 miles out, apparently parallel with the river and in the bottom land, I did not see any good locality. The cotton field here are all plowed, some of them very carelessly so that quite a number of old stalks are still standing or at least are not plowed under.

Monday, Jan. 6 Below freezing again in the morning

but quite warm towards noon. Went out to Mr. Heath's place — just 1 hour and 15 min. walking — Examined the dead cotton bolls in the part of the field that has not been plowed but did not find any more larvae. Many of the stalks there have been pulled up. The pigs have done considerable rooting there but

They were apparently cut after insects. The pasture adjacent to this part of the farm toward the mill has been thoroughly burned over so that there is no chance there for hibernation. I found over the few fence rails lying there; the fire did not penetrate beneath the boards but there was no animal there. At the southeastern corner of the farm some cotton plants - now dead in the tall weeds - have not been plowed up. As a general thing the plowing up has been done quite carefully. The north side of the farm adjoins the uncultivated bottom lands where there is a perfect wilderness of tall weeds with salisbury oaks and cottons. The grass beneath the weeds is at places quite thick. Just opposite the farm the timber has been cut down some time ago and stumps abound. Hunted under old bark, found a few other insects but no A. Was quite tired when I reached the hotel again.

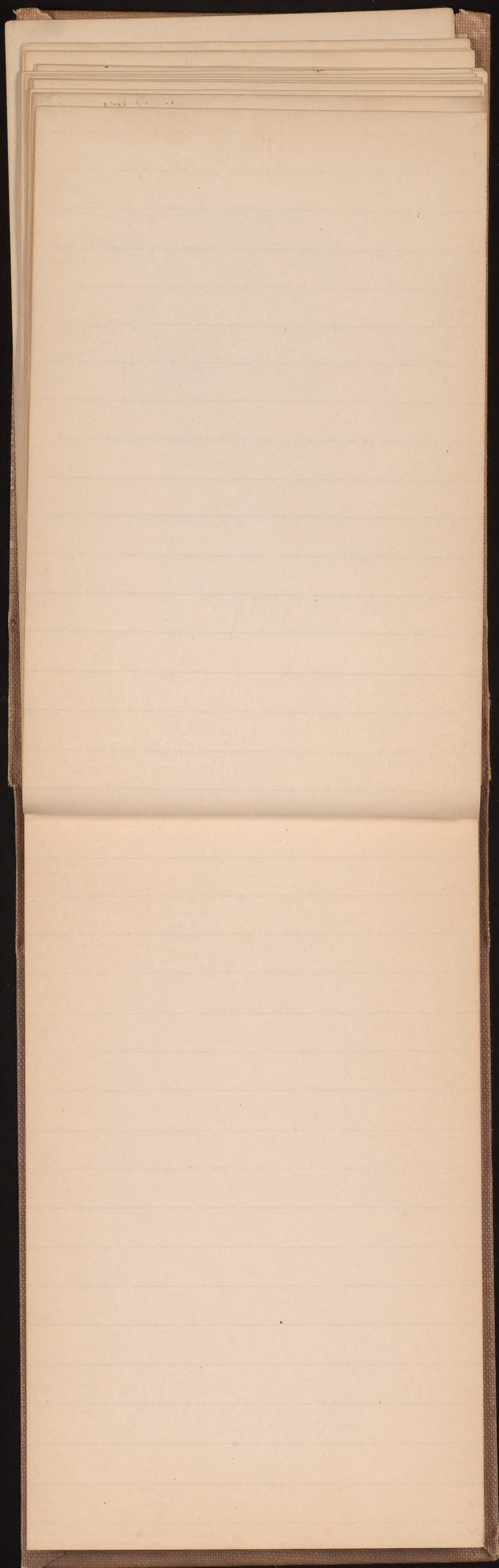
Thursday, Jan 7 Weather somewhat warmer than yesterday. Went into the bottom, hunted under bark of old oaks also among the dense grassy spots on cotton fields. Found one *Cicery* in egg of ^{large} A. in a cotton boll. The cotton field toward the river is now being plowed. The rake up the exploded stalks into a few

great piles, in other words they drag the stalks a long way before they reach the common pile. — Parasites of *A.* or at least parasites which hibernates in the earlier stages seem to be extremely rare. I have hitherto found only one parasitized *A.* pupa in a blossom; and one large parasitic hymenopter pupa, also in a blossom.

Wednesday, Jan. 8. Very foggy in the morning, but clear and warm later. Went into the bottom along the upper road to the last cotton field and hunted in the old blossoms. Although I had here, several days ago, found a number of living pupae & larvae I failed to-day to find a single one but found several parasites.

Thursday, Jan. 9 — Warm and clear. Went into the woods in the bottom and sifted under old leaves, also investigated the fence posts and old alder trees but did not find any *A.*

Friday, Jan. 10 — Weather warm and clear. Went into the bottom by the lower road. Hunted among the old flower blossoms of cotton; found a few living larvae of *A.* Sifted among old leaves in the



No. 12750 (Cover and Filler,) - 60 leaves ruled.
 No. 12750 $\frac{1}{2}$ (Filler only,) - " "
 No. 12751 (Cover and Filler,) - " unrul'd.
 No. 12751 $\frac{1}{2}$ (Filler only,) - " "

NOTE BOOK.

TRADE MARK REGISTERED



SEPARATE LEAF

Reversible

EMPIRE

13/2

